

PHENIX WEEKLY PLANNING



5/2/2013
Don Lynch

This Week

- Run 13 Continues: run support maintenance
- No scheduled access this week: next maintenance day: 5/8
- Ethane Tube Trailer Upgrade Continues:
Procedure Done, Plumbing fittings Acquired
- mRPC Test Lab (Formerly RPC Factory): Blue Sheets done, UPS needs repair, Procedures done and done and done ready for approval signatures
- Continue VTX strip pixel stave re-design
- Continue sPHENIX support
 - HCal prototype design being firmed up
 - EMCal prototype design continuing
- Continue MPC-Ex design
- Future IR evolution modeling

Next Week

- Run 13 Continues: run support, general maintenance
- Next Scheduled Maintenance Day: Wednesday, May 8
- mRPC Test Lab (Formerly RPC Factory) Startup and Walkthru
- Continue VTX strip pixel stave re-design
- Continue sPHENIX support
- Continue MPC-Ex design
- Future IR evolution modeling



Ethane Trailer Project: In progress



5/2/2013

New Gas Analyzer Project (RPC recirculation and more)



mRPC Test Lab Project

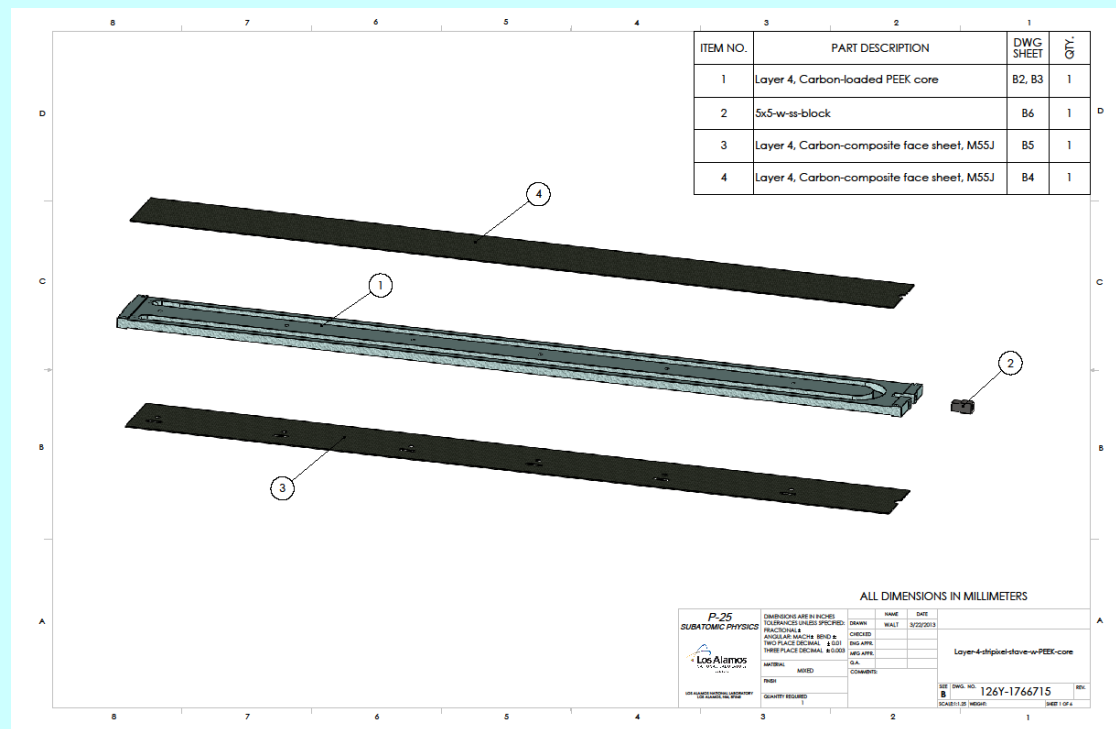
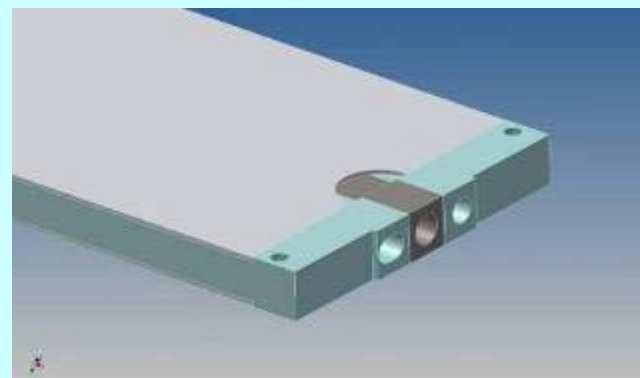
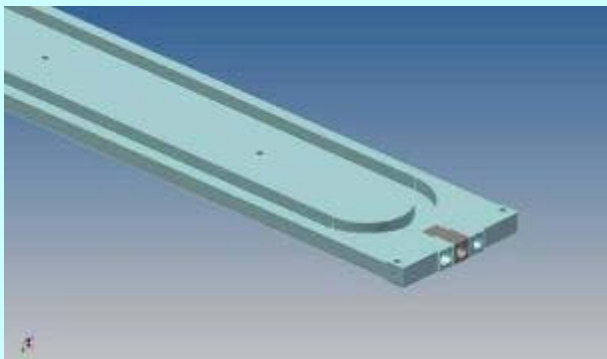
TECHNICAL SUPPORT



5/2/2013

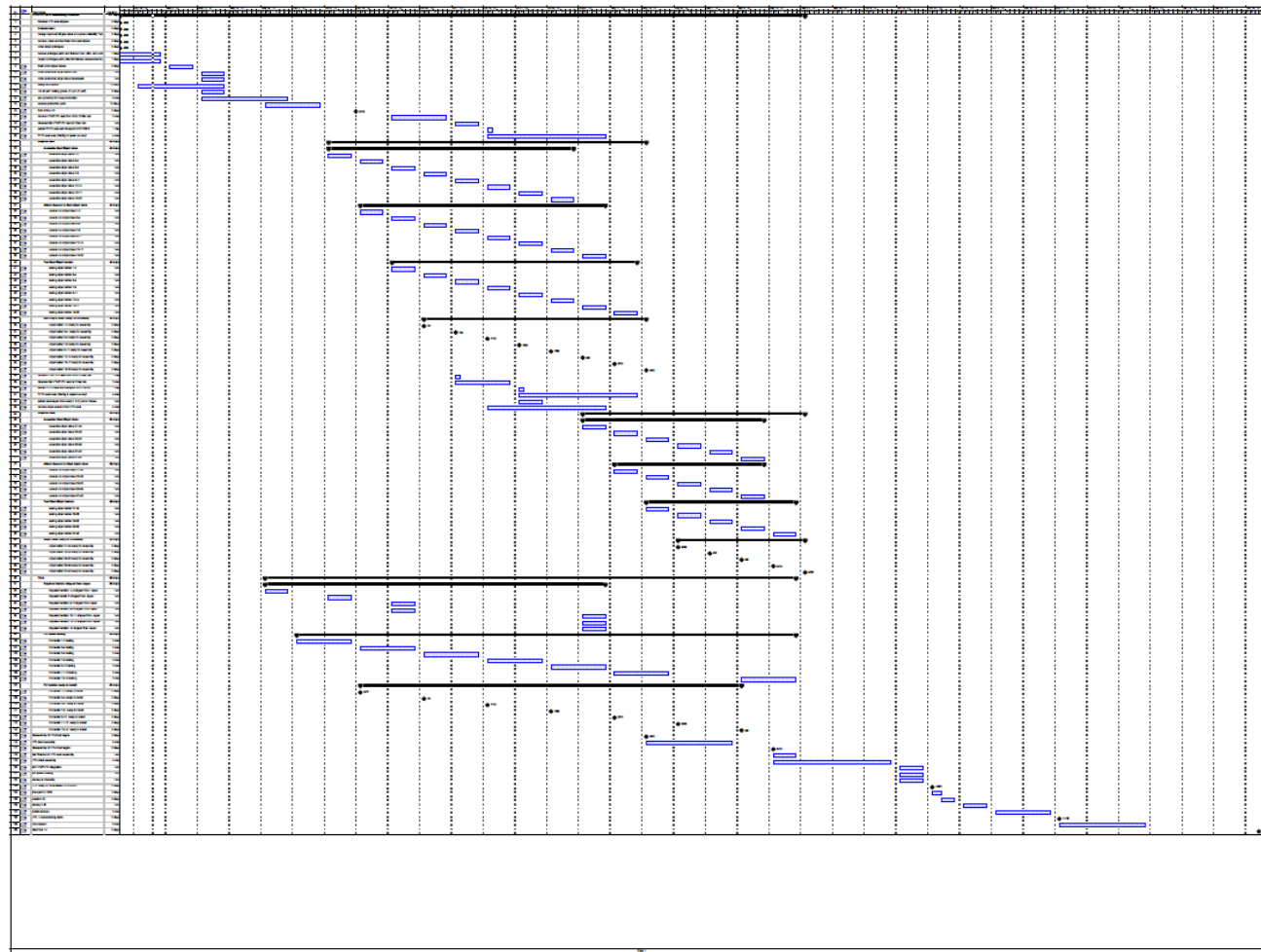
Prototypes of updated stave design are in progress expect to be fabricated by end of April

7

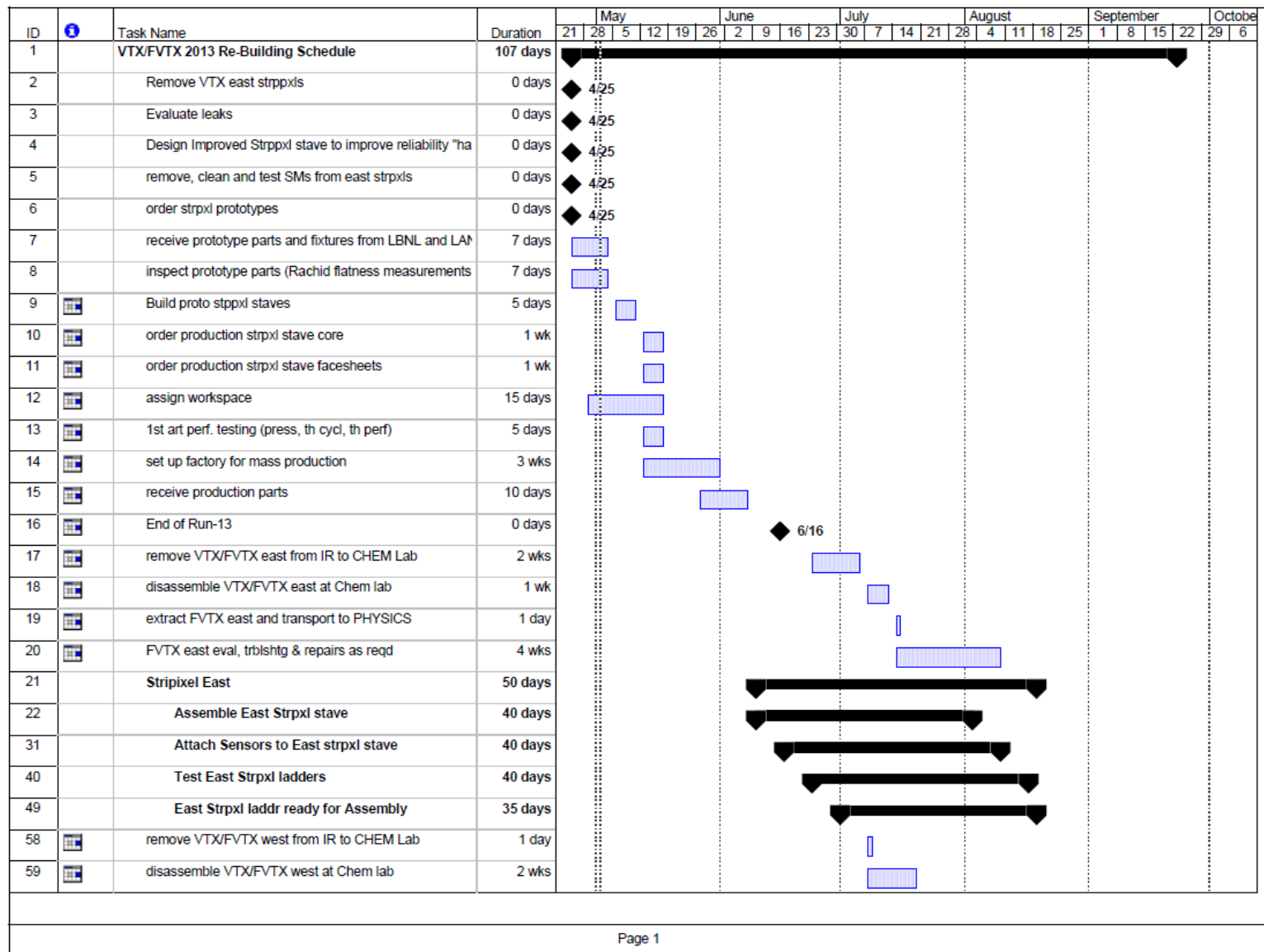


2013 VTX/FVTX Repair/Upgrade/Restoration

TECHNICAL SUPPORT 2013

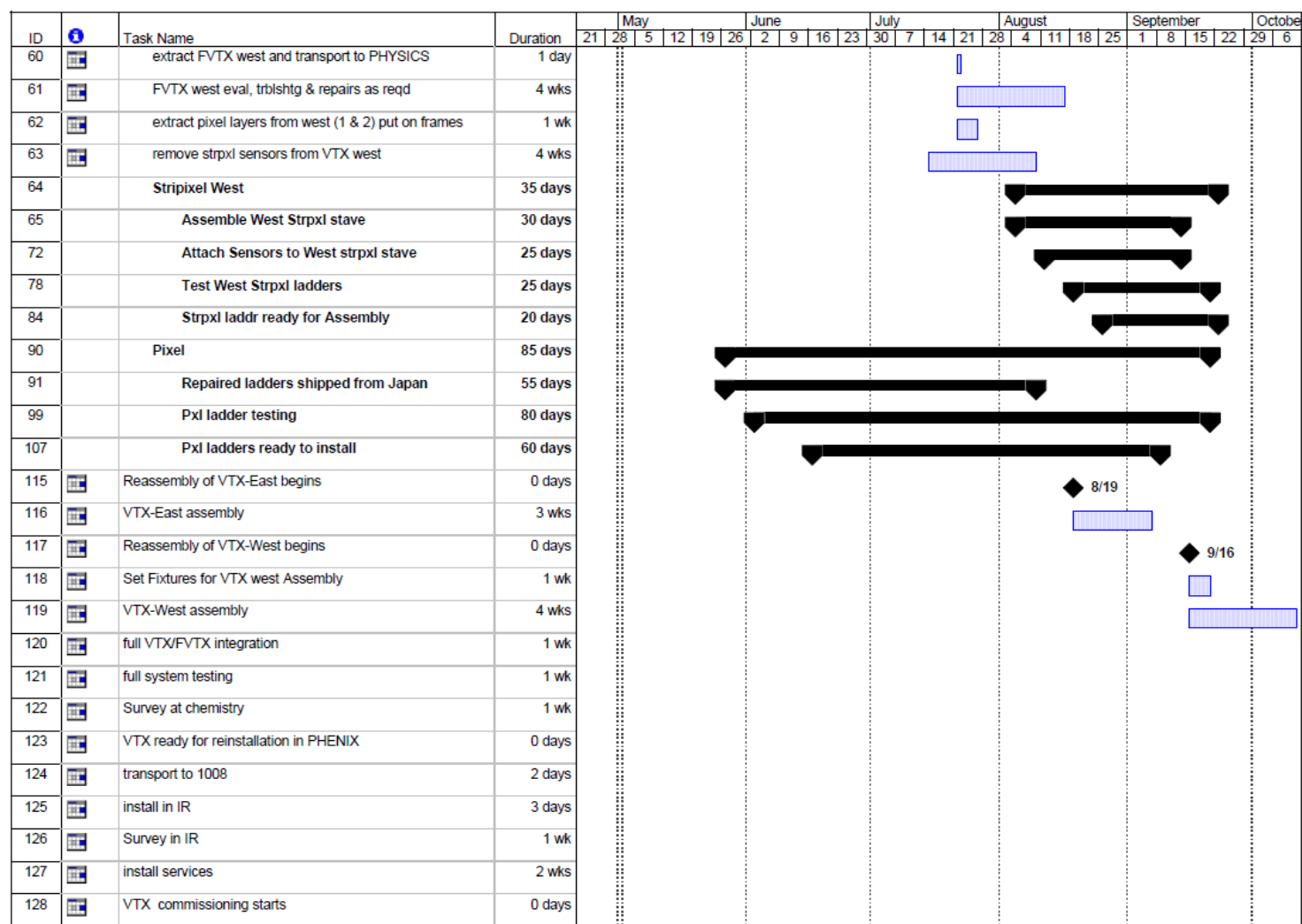


TECHNICAL SUPPORT NOTES



2013 VTX/FVTX Repair/Upgrade/Restoration (cont'd)

TECHNICAL SUPPORT NOTES





Existing vacuum bellows anti-squirm
In MPC S Cavity



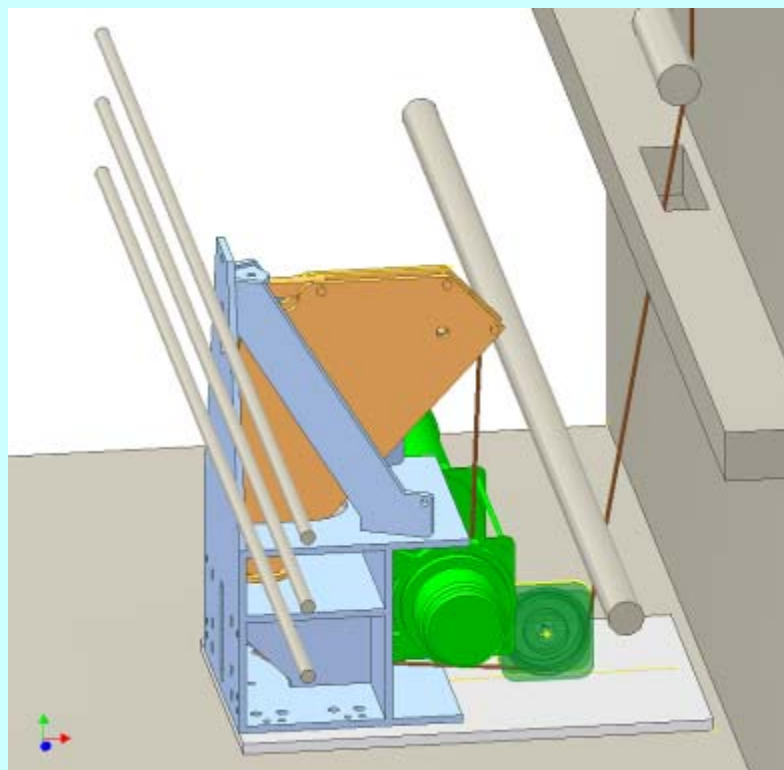
Proposed vacuum bellows anti-squirm
In MPC S Cavity to accommodate MPC-Ex



1st Tungsten Plate received: Inspection OK

Window Washer Winch Upgrade

TECHNICAL SUPPORT 2013



Purchase Order Pinned

Attention: Donald Lynch

Company: Brookhaven National Lab

Phone: 631-344-2253

Based on the information provided to us for an AC hoist to be used for lifting, we are pleased to propose the following:

Line	Qty.	Product:	Net Each	Extended
1	1	Columbia HF2100-2A17-L-03 AC Electric Hoist <ul style="list-style-type: none"> • 2.0 HP TEFC UL-listed brakemotor • 230/3/60 input power • Automatic, load-suspending braking system • Permanently lubricated, high-efficiency planetary gear reduction • Argent gray enamel paint finish • Includes single speed low voltage controls <ul style="list-style-type: none"> ◦ Reversing motor starter in a NEMA 4X fiberglass enclosure ◦ UL-listed ◦ Includes NEMA 4X hand-held pendant control with UP/DOWN momentary contacts and up to 15' lead Does not include wire rope	\$5,022.00	\$5,022.00

Options:

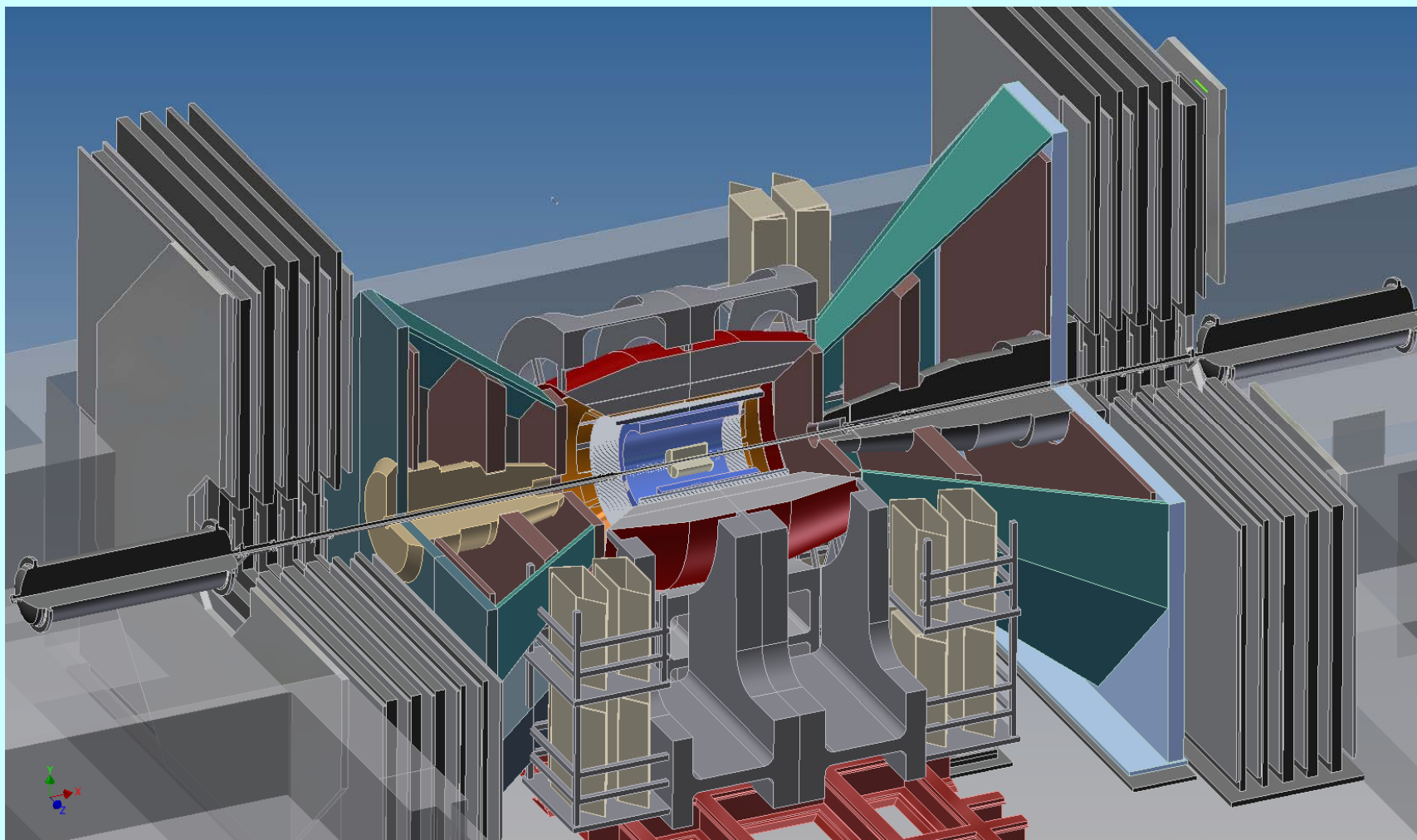
Line	Qty.	Product:	Net Each	Extended
2	1	AutoAdvance Line Spooler <ul style="list-style-type: none"> • Designed and built for Columbia HF2100-2A17-L-03 • Incoming line from front of spooler • Fabricated steel frame • Sheaves are steel construction, grooved for 3/8" line • Ensures proper line spooling regardless of fleet angle • Rope tension must be maintained for proper operation 	\$3,298.00	\$3,298.00

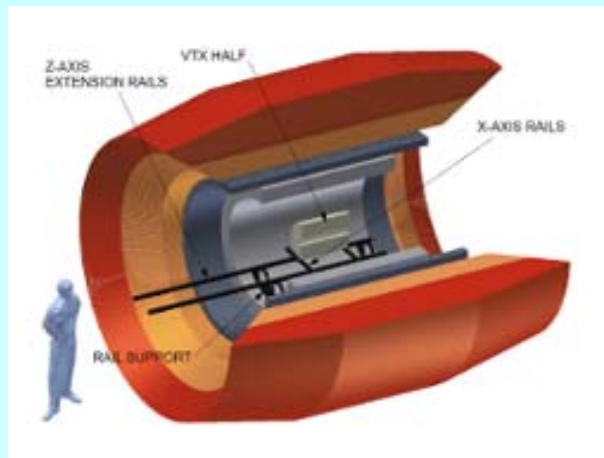
Line	Qty.	Product:	Net Each	Extended
3	1	VLS-6 Vertical Lead Sheave <ul style="list-style-type: none"> • 6,000 lbs load limit • Can be bolted down or welded for installation • Fabricated steel construction • Offset design allows for simple installation at any angle • Bronze bushed steel sheave grooved for 3/8" wire rope 	\$458.00	\$458.00

Line	Qty.	Product:	Net Each	Extended
4	1	Wire Rope <ul style="list-style-type: none"> • 200' of 3/8" stainless steel wire rope (7x19 construction) with latching hook • Supplied loose 	\$684.00	\$684.00

sPHENIX

TECHNICAL SUPPORT 2013





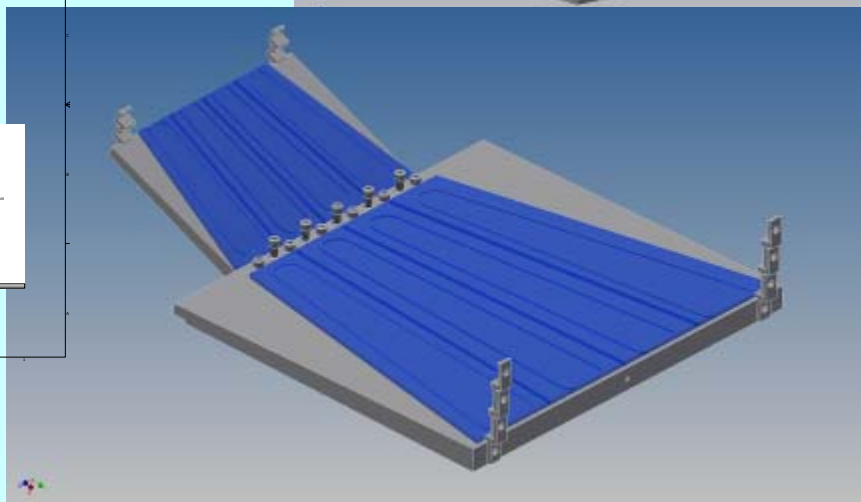
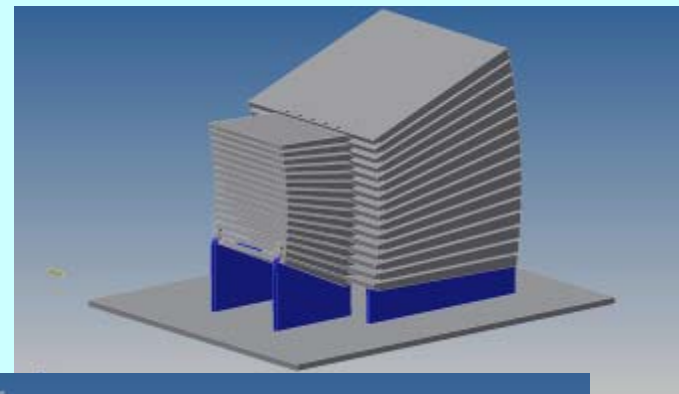
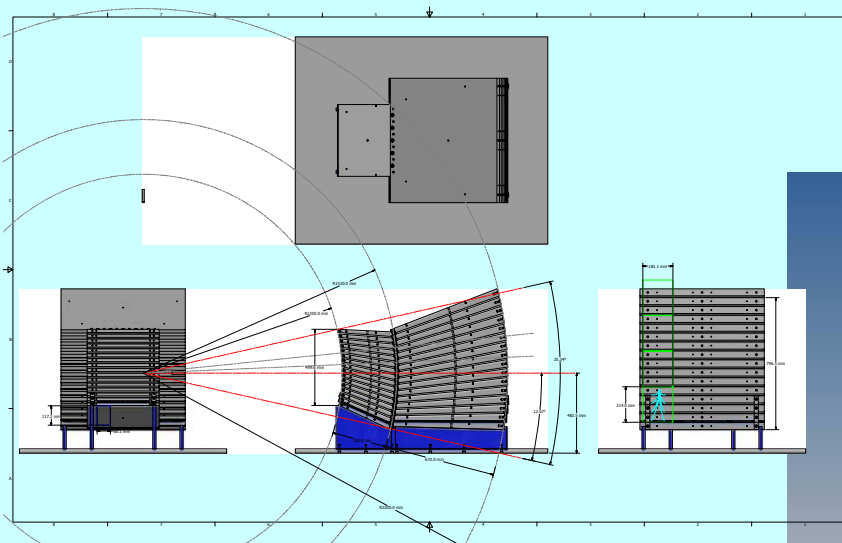
sPHENIX Proposed Upgrade

Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

Prototype HCal and EMCal in progress

Bid packages for Hcal steel and scintillators in progress to be issued by end of the month

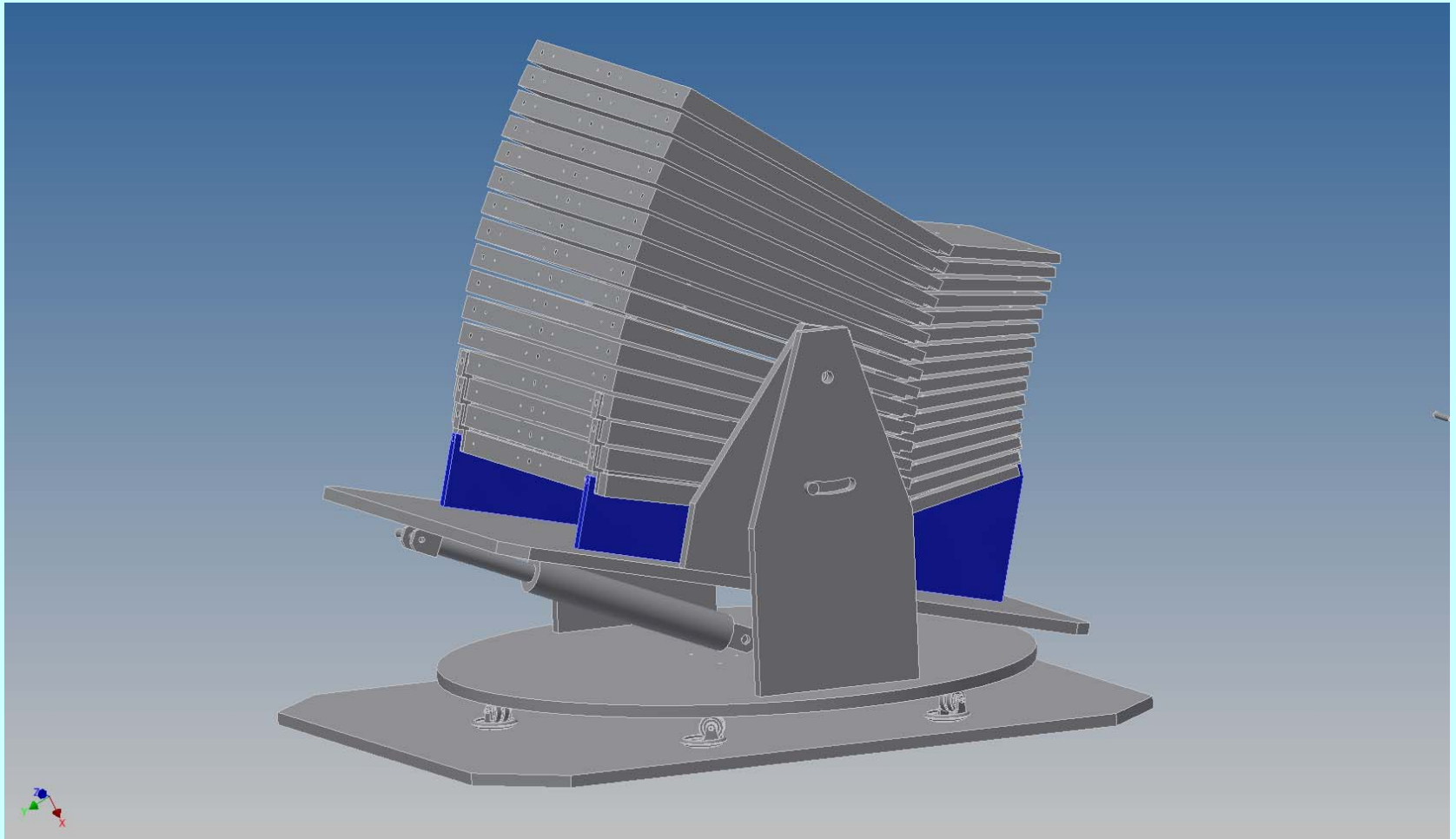
Meeting tomorrow with Magnet experts (Friday 4/26) to define SMD participation to develop SC Magnet preliminary design report by July



5/2/2013

HCal Prototype Assembly Including 2 rotational DOF's

TECHNICAL SUPPORT 2013



Expect to place order for HCal prototype parts next week

5/2/2013

Major Projects This Summer:

- VTX repairs/upgrades/general maintenance (Mike L.)
- DC East Window Replacement (Kenny J.)
- MPC-Ex Initial (partial) Installation (Jim L.)
- mRPC Tests in mRPC Test Lab (formerly RPC Factory) (Frank T.)
- sPHENIX Prototypes assembly & tests (All)
- MuTr troubleshooting and Repairs (Chris P.)
- Window Washer Winch upgrade (Jim L.)

Other Mechanical (TBD)

Other Electrical Projects

- HVAC Controls Upgrade (Frank T.)
- Complete Window Washer Controls Upgrade (Frank T.)

Other Electronics Projects

- Additional upgrading of ADAM system to MODBUS (Sal P.)
- Electronics research in support of sPHENIX and RATCAP (Sal P.)
- Lecroy HV communications upgrade (Sal P.)

Other Gas System Projects (TBD)

- RPC Gas Recirc. Upgrade (John T.)
- Drawing and Config. Control Improvements (SULI Student)

Other Infrastructure Projects (TBD)

TECHNICAL SUPPORT 2013

Prep for 2013 shutdown	2/11-6/11/2013
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
VTX Strippixel redesign	In-progress
VTX Strippixel 1 st article stave assembly	5/3/2013
VTX Strippixel 1 st article qualification/performance tests	5/17/2013
VTX strippixel stave production	5/20-8/30/2013
VTX Strippixel sensor reclamation	4/1-8/30/2013
VTX Strippixel ladder assembly	6/1-9/27/2013
Pixel Ladder repairs	in progress
End of Run Party	6/28/2013
Run 12 Ends	6/11/2013
Shutdown Standard Tasks	6/11-7/19/2013
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
Disassemble VTX/FVTX services	7/1-7/19/2013
July 4 th Holiday	7/4-5/2013
Remove VTX/FVTX and transport to Chemistry Lab	7/8/2013
Assemble, Test and Install MPC-Ex (North only?)	7/22-10/1/2013

TECHNICAL SUPPORT 2013

MuTR Troubleshooting, maintenance and repairs	7/22-9/27/2013
Summer Sunday (8/11) Prep and teardown	8/7-8/13/2013
Summer Sunday (RHIC)	8/11/13
DC East Window Upgrade and Related Repairs	8/19-9/27/2013
sPHENIX HCal Prototype Assembly/test	8/19-10/15/2013
Labor Day Holiday	9/2/2013
Repair upgrade, reassemble VTX/FVTX (pixels and strip-pixels)	7/11-10/13/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/16-10/27/2013
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Pre-run commissioning and prep for run 14	11/1-12/31/2012
Veterans Day, Lab Holiday	11/11/2013
Prep for EC roll in	11/1-11/9/2013
Roll in EC	11/10-11/12/2013
Prep IR for run	11/1-11/30/2013
Thanksgiving Holidays	11/28-29/2013
Pink/Blue/White sheets	12/14-12/31/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Start run 14	1/2/2014

1. Vehicle Accidents:

- a. Any accidents with Government Vehicles on and off site must be called into your Supervisor and BNL Police as soon as it happens.
- b. The Supervisor must call ESSHQ Division as soon as possible.
- c. The same reporting should follow any private vehicle accidents if they are onsite.
- d. This is becoming an issue at BNL, i.e., delays in vehicle accident reporting.
- e. If we don't want DOE to further reduce our vehicle fleet, please always follow these requirements.

2. Ladder Safety

See Website with ~12 minute video: www.stopconstructionfalls.com

3. LOTO:

New LOTO Subject Area should be out in a few weeks. Includes table on energy sources provides threshold information to evaluate whether lockout/tagout should be considered or is required.



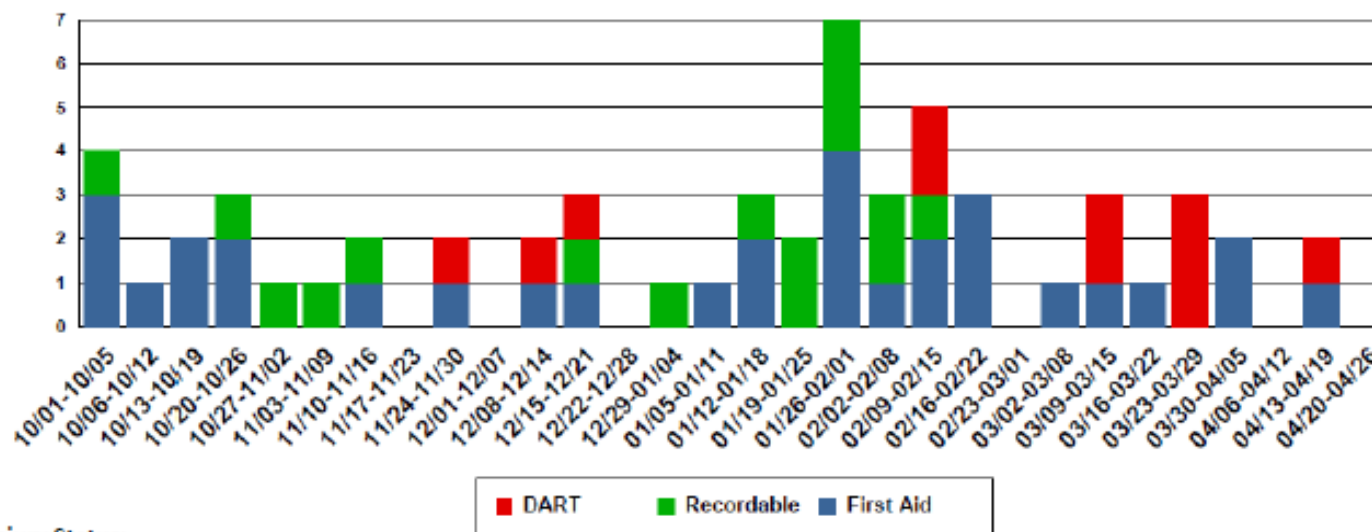
Form of Energy	Consider Use of Lockout/Tagout Based on Results of Analysis	Lockout/Tagout is Required*
Electricity AC 60 Hz	>50 V and <5 mA Or < or = 50 V	>50 V and >5 mA
Electricity DC All	>50 V and <=40 mA or < = 100 V	>100 V and >40 mA
Electricity Capacitors All	Other than values specified in right hand column	Stored energy >100 V and >1 J, or >400 V and >0.25 J
Electricity Batteries All	<100V	>100 V
Electricity Sub-RF 1 Hz to 3 kHz	>50 V and <5 mA Or < or = 50 V	>50 V and >5 mA
Electricity RF	All**	N/A
Thermal Energy (Hot)	Liquids less than 120°F (52°C)	Liquids equal to or greater than 120°F (52°C)***
Thermal Energy (Cold)	Liquids greater than 27°F (-3°C)	Liquids equal to or less than 27°F (-3°C)



Form of Energy	Consider Use of Lockout/Tagout Based on Results of Analysis	Lockout/Tagout is Required*
Mechanical Motion	All	N/A
Potential Energy	All	N/A
Pneumatic Energy****	Equal to or less than 150 psi	Greater than 150 psi***
Hydraulic Energy****	Equal to or less than 150 psi	Greater than 150 psi***
Nonionizing Radiation**	Other electromagnetic radiation	Class 3B or class 4 lasers**
Ionizing Radiation	Potential to exceed administrative control level - consult with operating department prior to starting work	N/A
Chemical	All	N/A



Injuries Per Week (FY) As of 4/26/2013



Injury Status:

FY13 YTD: DART – 11, TRC – 27, First Aid – 31

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seq/OccInj/BNLInjuries.aspx>

Recent Injuries

4/18/13	First Aid	An employee fell on the sidewalk, receiving minor abrasions.
4/17/13	DART	An employee was removing a motor from an A/C unit when he injured his arm. He received first aid at the OMC. However, he subsequently was put on restrictions making this recordable and a DART case.
2/5/13	Recordable	An employee was manually handling boxes of files and injured her shoulder. At the clinic, an examination was conducted and the employee returned to work, with no medical treatment. UPDATE: She later received a steroid shot and a prescription for physical therapy, making this recordable.
2/4/13	Recordable	An employee developed numbness and tingling in her right arm after using the computer. An ergonomic evaluation was performed. At the OMC, the employee received first aid. After an evaluation, the worker began a regimen of physical therapy.

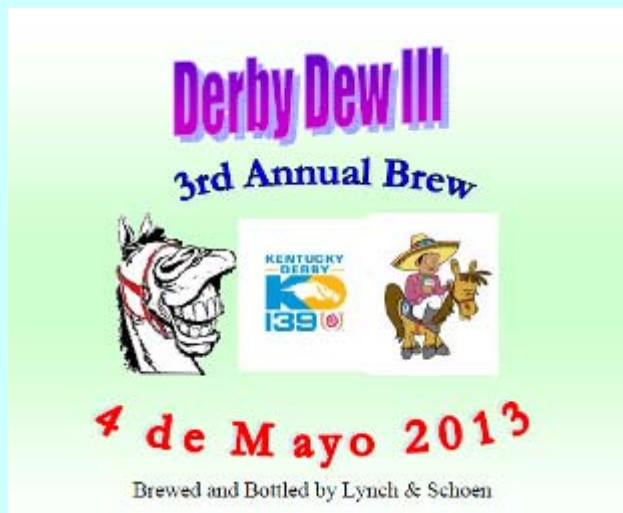


Recent Events		
4/26/13	Non-Reportable	An LPD Officer was dispatched to the West parking lot of building #911 in reference to a government vehicle accident. Driver was backing a government van out of a parking space and backed into a dumpster. Driver states he received no injuries, and further states he didn't see the dumpster while backing up. Damage to the van was contained to the right rear break light area. (Event Link)
4/25/13	Non-Reportable	A worker was operating a Government Vehicle [E-35361] (a long-bed pick-up truck with a canopy over the bed), and attempting to leave the parking lot outside Building 528. While backing up and turning the vehicle, the rear driver's side bumper/quarter panel/corner of the vehicle scraped against the exterior surface/corner of Bldg. 528. While there were no injuries, some surface damage occurred both to the vehicle and the building. The worker immediately parked the vehicle back in the lot and called for Laboratory Protection Division to report incident. LPD called the ORPS Categorizer after arriving on-scene. (Event Link)
4/22/13	SC-BNL	Two Lock Out / Tag Out (LOTO) red tags with the same identification number were found in use within a Photon Sciences facility. Photon Sciences personnel are investigating to determine how many tags with duplicate numbers are in service. The red tags are only part of the LOTO process. Systems that are LOTO'd out of service are also locked. The systems found with the duplicate tag numbers have unique locks and it is expected that is true for other systems that may be found to be tagged with duplicate numbered tags. There is no failure to follow the LOTO process and no added risk to personnel from this finding, but management is concerned to find the duplicate numbers as it could be a source of confusion. PS Management has decided to identify this event as an SCBNL, "Management Concern" to alert others at the Laboratory of this finding as these red tags are BNL stock items that are in use across the site. (Event Link)



Where To Find PHENIX Engineering Info

TECHNICAL
SUPPORT
2013



My Pick: 1-2-3

Revolutionary,
Veranzano, Oxbow)

Kentucky Derby this Saturday

Watch All Day on NBC Sports Channel

Watch the Race 4:00-7:00 PM on NBC

Horses to Watch:

Goldencents (10-1), Revolutionary (8-1),

Veranzano (9-2), Orb (9-2), OxBow (35-1),

Falling Sky (50-1), Overanalyze (10-1),

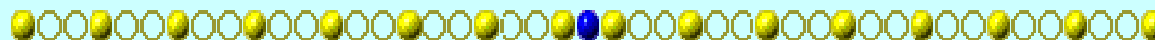
Itsmyluckyday (12-1) (best name), Normandy

Invasion (10-1), Java's War (16-1), The rest:

Black Onyx, Charming Kitten, Fear the Kitten,
Frac Daddy, Golden Soul, Lines of Battle, Mylute,
Palace Malice, Vyjack, Will Take Charge (all 20-1
or more)

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

5/2/2013



24